

## **ABSTRACT**

1        A full-color LED display includes red, green and blue LED elements. A first  
2        substrate is used to form red and green LED elements which are then covered by a first  
3        passivation layer. A second substrate is bonded to the passivation layer and polished as a  
4        thin substrate layer. A blue LED element is fabricated on the thin substrate layer. The  
5        three LED elements are then covered by a second passivation layer to construct a full-  
6        color LED device. A full-color, high resolution and high brightness LED display is  
7        formed by a plurality of full-color LED devices arranged in rows and columns in a matrix  
8        form.